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*CORRESPONDENCE
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production.office@frontiersin.org

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Erratum: Flexible sensor concept and an integrated collision sensing for efficient human-robot collaboration using 3D local global sensors

Frontiers Production Office*

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KEYWORDS

collision avoidance, human–robot collaboration, intrusion distance, sensor concept, distance sensors

An Erratum on
Flexible sensor concept and an integrated collision sensing for efficient human-robot collaboration using 3D local global sensors

by Rashid A, Alnaser I, Bdiwi M and Ihlenfeldt S (2023). Front. Robot. AI 10:1028411. doi: 10.3389/frobt.2023.1028411

Due to a production error, there was an error in the figures as published. The correct **Figures 2–9**, **Figures 11**, **12** appear below.

The article title was revised to read *"Flexible sensor concept and an integrated collision sensing for efficient human-robot collaboration using 3D local global sensors"*.

The publisher apologizes for these mistakes. The original version of this article has been updated.

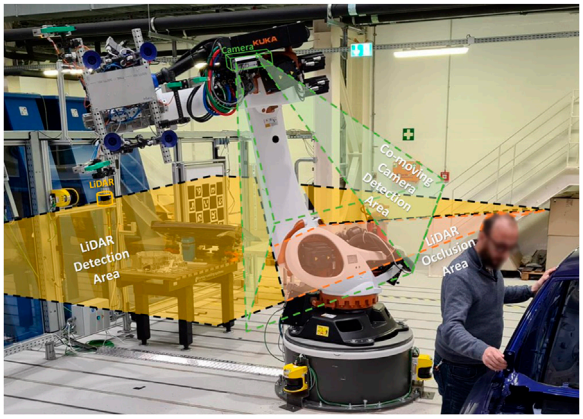

FIGURE 2
Proposed flexible and efficient sensor system.

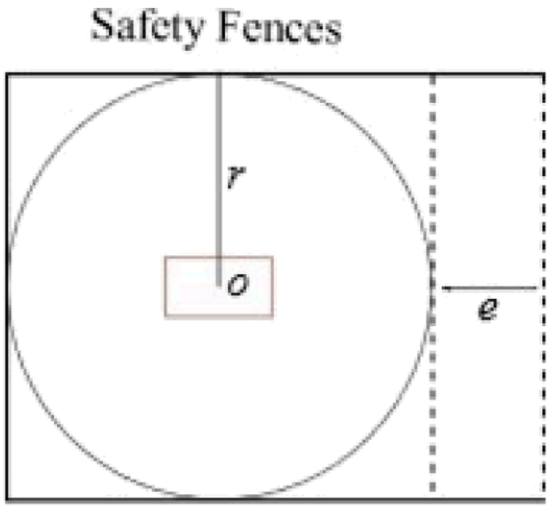

FIGURE 3
Simplified co-existence cell.

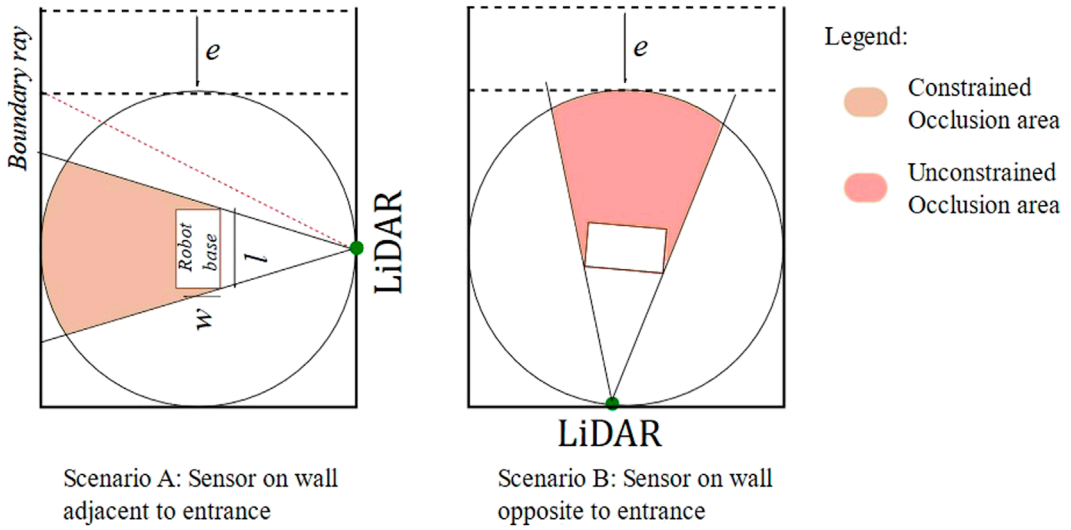

FIGURE 4
Different types of occlusions.

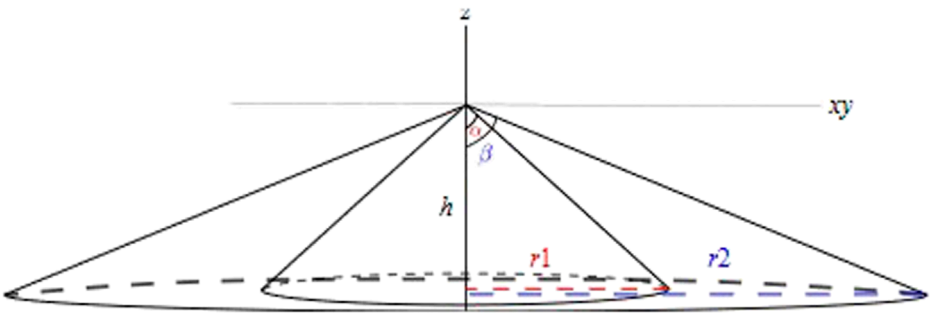

FIGURE 5
LiDAR sensor concept.

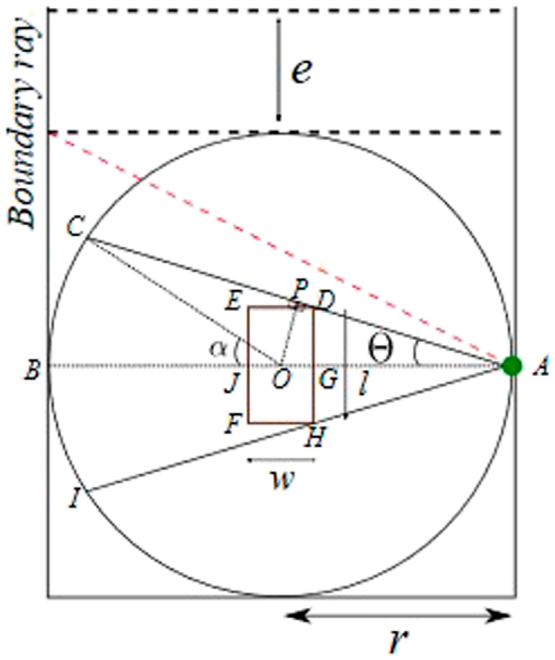

FIGURE 6
Constrained occlusion with sensor at middle of fence.

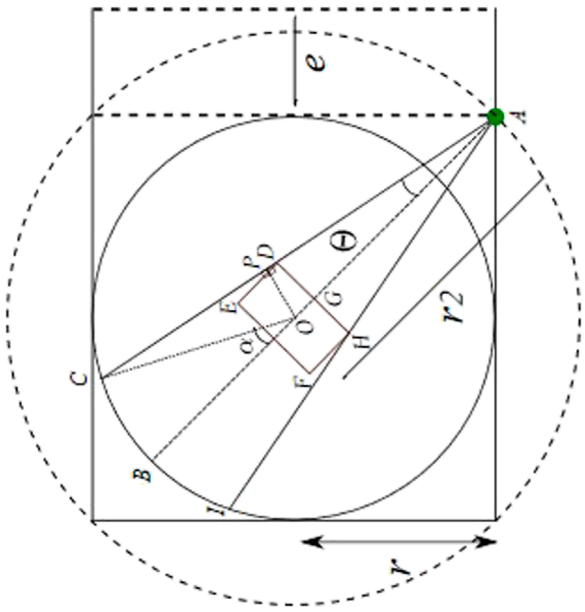

FIGURE 7
Constrained occlusion with sensor at the entrance.

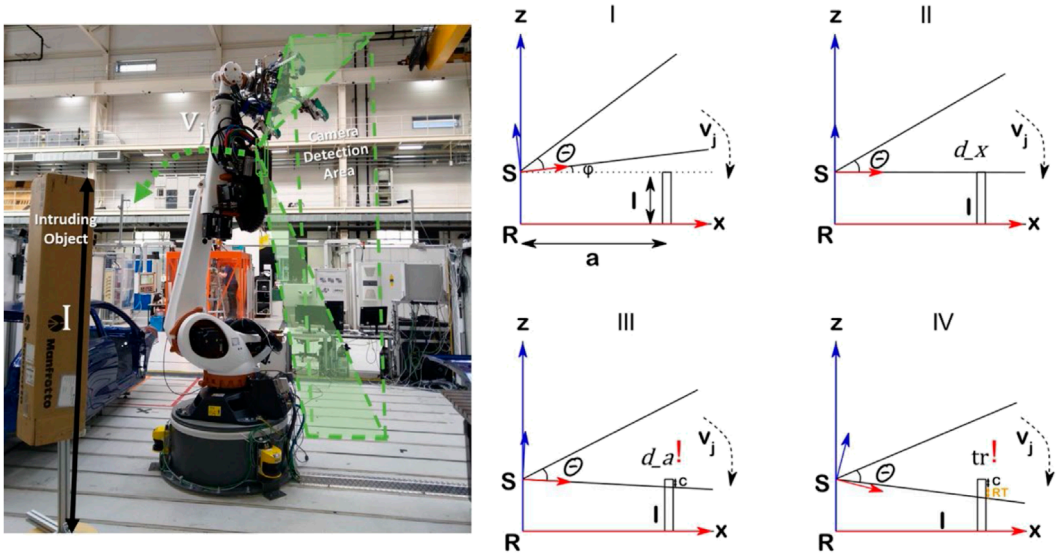

FIGURE 8
Data Capturing experiment for safety parameter estimation.

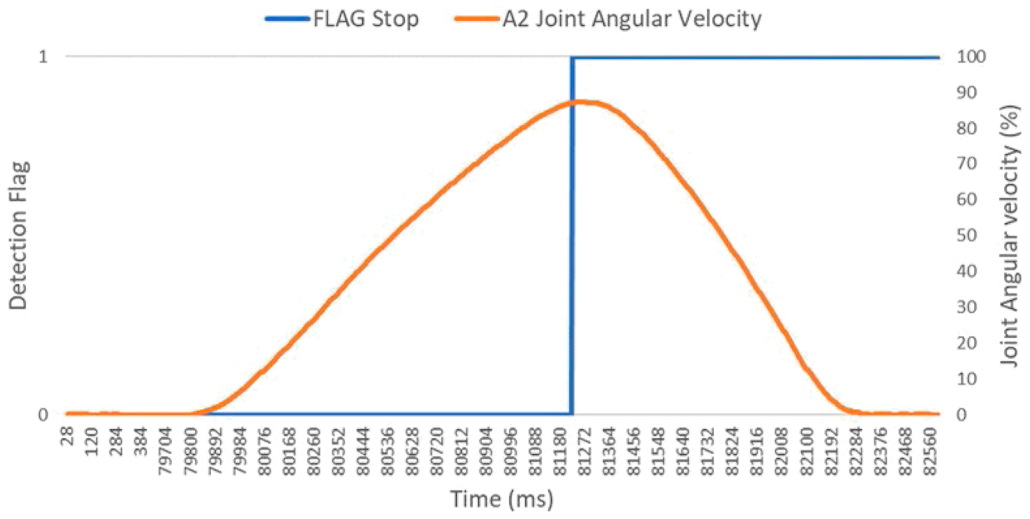

FIGURE 9
Complete trajectory for collision sensing and stop trigger for a single iteration.

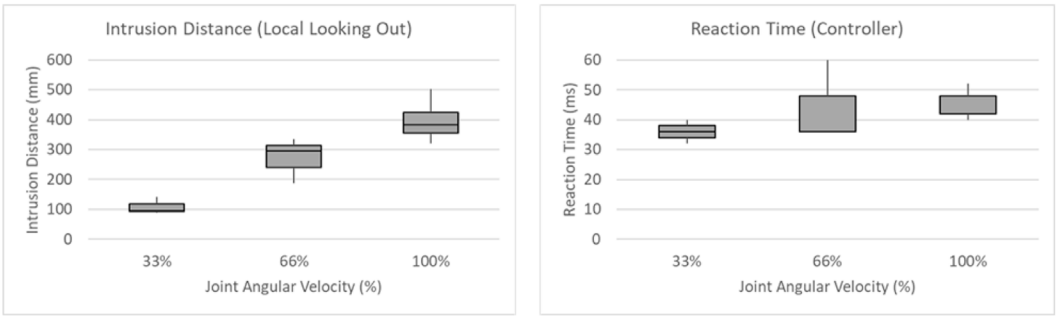

FIGURE 11
Box plot on multiple iterations at multiple robot velocities.

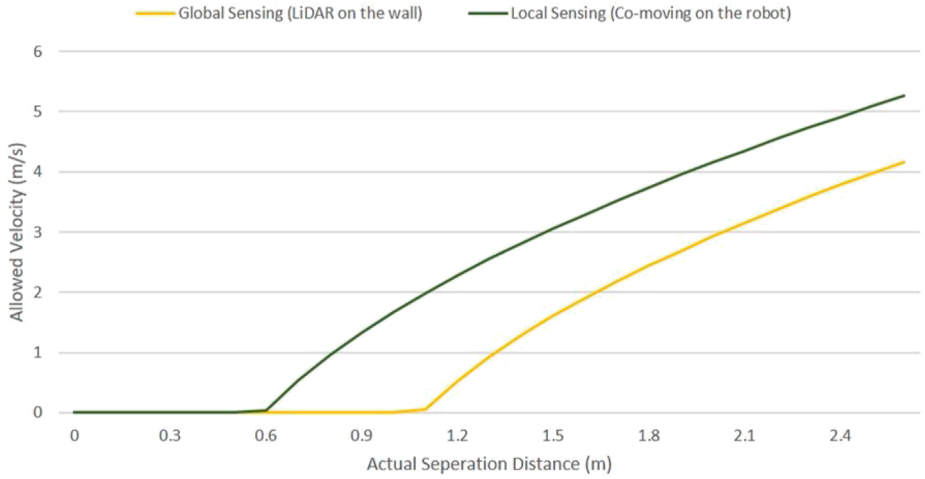

FIGURE 12
Safety distance and robot velocity for local (co-moving) and global collision sensing.